

## Federal Communications Commission

## § 78.18

signed by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall in that event separately set forth the reasons why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

(c) Only the original of applications, amendments, or related statements of fact need be signed; copies may be confirmed.

(d) Applications, amendments, and related statements of fact need not be submitted under oath. Willful false statements made therein, however, are punishable by fine and imprisonment, United States Code, title 18, section 1001, and by appropriate administrative sanctions, including revocation of station license pursuant to section 312(a)(1) of the Communications Act of 1934, as amended.

[37 FR 15926, Aug. 8, 1972]

### § 78.17 Amendment of applications.

Any application may be amended as a matter of right prior to the adoption date of any final action taken by the Commission with respect to the application, merely by filing the appropriate number of copies of the amendment in question duly executed in accordance with § 78.16. If a petition to deny has been filed, the amendment shall be served on the petitioner.

[37 FR 15926, Aug. 8, 1972]

### § 78.18 Frequency assignments.

(a) The Cable Television Relay Service is assigned the band of frequencies from 12.70 to 13.20 GHz. This band is shared with the Fixed-Satellite Service (earth-to-space) from 12.70 to 12.75 GHz and Television Auxiliary Broadcast Stations from 12.70 to 13.20 GHz. The following channels may be assigned to CARS stations for the propagation of radio waves with the indicated polarization:

(1) For CARS stations using FM transmission:

#### GROUP A CHANNELS

Designation	Channel boundaries (GHz)
A01 <sup>1</sup>	12.700–12.725
A02 <sup>1</sup>	12.725–12.750
A03 <sup>1</sup>	12.750–12.775
A04 <sup>1</sup>	12.775–12.800
A05 <sup>1</sup>	12.800–12.825
A06 <sup>1</sup>	12.825–12.850
A07 <sup>1</sup>	12.850–12.875
A08 <sup>1</sup>	12.875–12.900
A09 <sup>1</sup>	12.900–12.925
A10 <sup>1</sup>	12.925–12.950
A11 <sup>1</sup>	12.950–12.975
A12 <sup>1</sup>	12.975–13.000
A13 <sup>1</sup>	13.000–13.025
A14 <sup>1</sup>	13.025–13.050
A15 <sup>1</sup>	13.050–13.075
A16 <sup>1</sup>	13.075–13.100
A17 <sup>1</sup>	13.100–13.125
A18 <sup>1</sup>	13.125–13.150
A19 <sup>1</sup>	<sup>2</sup> 13.150–13.175
A20 <sup>1</sup>	<sup>2</sup> 13.170–13.200

<sup>1</sup> Appropriate polarization designation:

H=Horizontally polarized propagated radio wave.

V=Vertically polarized propagated radio wave.

R=Right-handed (clockwise) elliptically polarized propagated radio wave.

L=Left-handed (counter-clockwise) elliptically polarized propagated radio wave.

<sup>2</sup> See paragraph (1) of this section.

NOTE: Polarization designations shall be in accordance with IEEE standard 100–1972 as amended.

#### GROUP B CHANNELS

Designation	Channel boundaries (GHz)
B01 <sup>1</sup>	12.7125–12.7375
B02 <sup>1</sup>	12.7375–12.7625
B03 <sup>1</sup>	12.7625–12.7875
B04 <sup>1</sup>	12.7875–12.8125
B05 <sup>1</sup>	12.8125–12.8375
B06 <sup>1</sup>	12.8375–12.8625
B07 <sup>1</sup>	12.8625–12.8875
B08 <sup>1</sup>	12.8875–12.9125
B09 <sup>1</sup>	12.9125–12.9375
B10 <sup>1</sup>	12.9375–12.9625
B11 <sup>1</sup>	12.9625–12.9875
B12 <sup>1</sup>	12.9875–13.0125
B13 <sup>1</sup>	13.0125–13.0375
B14 <sup>1</sup>	13.0375–13.0625
B15 <sup>1</sup>	13.0625–13.0875
B16 <sup>1</sup>	13.0875–13.1125
B17 <sup>1</sup>	13.1125–13.1375

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GROUP B CHANNELS—Continued

Designation	Channel boundaries (GHz)
B18 <sup>1</sup> .....	<sup>2</sup> 13.1375– 13.1625
B19 <sup>1</sup> .....	<sup>2</sup> 13.1625– 13.1875

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.

<sup>2</sup> See paragraph (l) of this section.

NOTE: Polarization designations shall be in accordance with IEEE standard 100–1972 as amended.

(2) CARS stations using vestigial side-band AM transmission and FM transmission requiring a necessary bandwidth of no more than 6 MHz.

GROUP C CHANNELS

Designation	Channel boundaries (GHz)
C01 <sup>1</sup> .....	12.7005– 12.7065
C02 <sup>1</sup> .....	12.7065– 12.7125
C03 <sup>1</sup> .....	12.7125– 12.7185
C04 <sup>1</sup> .....	<sup>2</sup> 12.7185– 12.7225
C05 <sup>1</sup> .....	12.7225– 12.7285
C06 <sup>1</sup> .....	12.7285– 12.7345
C07 <sup>1</sup> .....	12.7345– 12.7405
C08 <sup>1</sup> .....	12.7405– 12.7465
C09 <sup>1</sup> .....	12.7465– 12.7525
C10 <sup>1</sup> .....	<sup>2</sup> 12.7525– 12.7545
C11 <sup>1</sup> .....	12.7545– 12.7605
C12 <sup>1</sup> .....	12.7605– 12.7665
C13 <sup>1</sup> .....	12.7665– 12.7725
C14 <sup>1</sup> .....	12.7725– 12.7785
C15 <sup>1</sup> .....	12.7785– 12.7845
C16 <sup>1</sup> .....	12.7845– 12.7905
C17 <sup>1</sup> .....	12.7905– 12.7965
C18 <sup>1</sup> .....	12.7965– 12.8025
C19 <sup>1</sup> .....	12.8025– 12.8085
C20 <sup>1</sup> .....	12.8085– 12.8145
C21 <sup>1</sup> .....	12.8145– 12.8205
C22 <sup>1</sup> .....	12.8205– 12.8265
C23 <sup>1</sup> .....	12.8265– 12.8325
C24 <sup>1</sup> .....	12.8325– 12.8385
C25 <sup>1</sup> .....	12.8385– 12.8445

GROUP C CHANNELS—Continued

Designation	Channel boundaries (GHz)
C26 <sup>1</sup> .....	12.8445– 12.8505
C27 <sup>1</sup> .....	12.8505– 12.8565
C28 <sup>1</sup> .....	12.8565– 12.8625
C29 <sup>1</sup> .....	12.8625– 12.8685
C30 <sup>1</sup> .....	12.8685– 12.8745
C31 <sup>1</sup> .....	12.8745– 12.8805
C32 <sup>1</sup> .....	12.8805– 12.8865
C33 <sup>1</sup> .....	12.8865– 12.8925
C34 <sup>1</sup> .....	12.8925– 12.8985
C35 <sup>1</sup> .....	12.8985– 12.9045
C36 <sup>1</sup> .....	12.9045– 12.9105
C37 <sup>1</sup> .....	12.9105– 12.9165
C38 <sup>1</sup> .....	12.9165– 12.9225
C39 <sup>1</sup> .....	12.9225– 12.9285
C40 <sup>1</sup> .....	12.9285– 12.9345
C41 <sup>1</sup> .....	12.9345– 12.9405
C42 <sup>1</sup> .....	12.9405– 12.9465

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.

<sup>2</sup> For transmission of pilot subcarriers or other authorized narrow band signals.

GROUP D CHANNELS

Designation	Channel boundaries (GHz)
D01 <sup>1</sup> .....	12.7597– 12.7657
D02 <sup>1</sup> .....	12.7657– 12.7717
D03 <sup>1</sup> .....	12.7717– 12.7777
D04 <sup>1</sup> .....	<sup>2</sup> 12.7777– 12.7817
D05 <sup>1</sup> .....	12.7817– 12.7877
D06 <sup>1</sup> .....	12.7877– 12.7937
D07 <sup>1</sup> .....	12.7937– 12.7997
D08 <sup>1</sup> .....	12.7997– 12.8057
D09 <sup>1</sup> .....	12.8057– 12.8117
D10 <sup>1</sup> .....	<sup>2</sup> 12.8117– 12.8137
D11 <sup>1</sup> .....	12.8137– 12.8197
D12 <sup>1</sup> .....	12.8197– 12.8257
D13 <sup>1</sup> .....	12.8257– 12.8317
D14 <sup>1</sup> .....	12.8317– 12.8377

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**GROUP D CHANNELS—Continued**

Designation	Channel bound- aries (GHz)
D15 <sup>1</sup> .....	12.8377– 12.8437
D16 <sup>1</sup> .....	12.8437– 12.8497
D17 <sup>1</sup> .....	12.8497– 12.8557
D18 <sup>1</sup> .....	12.8557– 12.8617
D19 <sup>1</sup> .....	12.8617– 12.8677
D20 <sup>1</sup> .....	12.8677– 12.8737
D21 <sup>1</sup> .....	12.8737– 12.8797
D22 <sup>1</sup> .....	12.8797– 12.8857
D23 <sup>1</sup> .....	12.8857– 12.8917
D24 <sup>1</sup> .....	12.8917– 12.8977
D25 <sup>1</sup> .....	12.8977– 12.9037
D26 <sup>1</sup> .....	12.9037– 12.9097
D27 <sup>1</sup> .....	12.9097– 12.9157
D28 <sup>1</sup> .....	12.9157– 12.9217
D29 <sup>1</sup> .....	12.9217– 12.9277
D30 <sup>1</sup> .....	12.9277– 12.9337
D31 <sup>1</sup> .....	12.9337– 12.9397
D32 <sup>1</sup> .....	12.9397– 12.9457
D33 <sup>1</sup> .....	12.9457– 12.9517
D34 <sup>1</sup> .....	12.9517– 12.9577
D35 <sup>1</sup> .....	12.9577– 12.9637
D36 <sup>1</sup> .....	12.9637– 12.9697
D37 <sup>1</sup> .....	12.9697– 12.9757
D38 <sup>1</sup> .....	12.9757– 12.9817
D39 <sup>1</sup> .....	12.9817– 12.9877
D40 <sup>1</sup> .....	12.9877– 12.9937
D41 <sup>1</sup> .....	12.9937– 12.9997
D42 <sup>1</sup> .....	12.9997– 13.0057

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.  
<sup>2</sup> See footnote 2 following GROUP C CHANNELS.

**GROUP E CHANNELS**

Designation	Channel bound- aries (GHz)
E01 <sup>1</sup> .....	12.9525– 12.9585
E02 <sup>1</sup> .....	12.9585– 12.9645
E03 <sup>1</sup> .....	12.9645– 12.9705

**GROUP E CHANNELS—Continued**

Designation	Channel bound- aries (GHz)
E04 <sup>1</sup> .....	<sup>2</sup> 12.9705– 12.9745
E05 <sup>1</sup> .....	12.9745– 12.9805
E06 <sup>1</sup> .....	12.9805– 12.9865
E07 <sup>1</sup> .....	12.9865– 12.9925
E08 <sup>1</sup> .....	12.9925– 12.9985
E09 <sup>1</sup> .....	12.9985– 13.0045
E10 <sup>1</sup> .....	<sup>2</sup> 13.0045– 13.0065
E11 <sup>1</sup> .....	13.0065– 13.0125
E12 <sup>1</sup> .....	13.0125– 13.0185
E13 <sup>1</sup> .....	13.0185– 13.0245
E14 <sup>1</sup> .....	13.0245– 13.0305
E15 <sup>1</sup> .....	13.0305– 13.0365
E16 <sup>1</sup> .....	13.0365– 13.0425
E17 <sup>1</sup> .....	13.0425– 13.0485
E18 <sup>1</sup> .....	13.0485– 13.0545
E19 <sup>1</sup> .....	13.0545– 13.0605
E20 <sup>1</sup> .....	13.0605– 13.0665
E21 <sup>1</sup> .....	13.0665– 13.0725
E22 <sup>1</sup> .....	13.0725– 13.0785
E23 <sup>1</sup> .....	13.0785– 13.0845
E24 <sup>1</sup> .....	13.0845– 13.0905
E25 <sup>1</sup> .....	13.0905– 13.0965
E26 <sup>1</sup> .....	13.0965– 13.1025
E27 <sup>1</sup> .....	13.1025– 13.1085
E28 <sup>1</sup> .....	13.1085– 13.1145
E29 <sup>1</sup> .....	13.1145– 13.1205
E30 <sup>1</sup> .....	13.1205– 13.1265
E31 <sup>1</sup> .....	13.1265– 13.1325
E32 <sup>1</sup> .....	13.1325– 13.1385
E33 <sup>1</sup> .....	13.1385– 13.1445
E34 <sup>1</sup> .....	<sup>3</sup> 13.1445– 13.1505
E35 <sup>1</sup> .....	<sup>3</sup> 13.1505– 13.1565
E36 <sup>1</sup> .....	<sup>3</sup> 13.1565– 13.1625
E37 <sup>1</sup> .....	<sup>3</sup> 13.1625– 13.1685
E38 <sup>1</sup> .....	<sup>3</sup> 13.1685– 13.1745

## GROUP E CHANNELS—Continued

Designation	Channel boundaries (GHz)
E39 <sup>1</sup> .....	<sup>3</sup> 13.1745– 13.1805
E40 <sup>1</sup> .....	<sup>3</sup> 13.1805– 13.1865
E41 <sup>1</sup> .....	<sup>3</sup> 13.1865– 13.1925
E42 <sup>1</sup> .....	<sup>3</sup> 13.1925– 13.1985

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.  
<sup>2</sup> See footnote 2 following GROUP C CHANNELS.  
<sup>3</sup> See paragraph (l) of this section.

## GROUP F CHANNELS

Designation	Channel boundaries (GHz)
F01 <sup>1</sup> .....	13.0125– 13.0185
F02 <sup>1</sup> .....	13.0185– 13.0245
F03 <sup>1</sup> .....	13.0245– 13.0305
F04 <sup>1</sup> .....	<sup>2</sup> 13.0305– 13.0345
F05 <sup>1</sup> .....	13.0345– 13.0405
F06 <sup>1</sup> .....	13.0405– 13.0465
F07 <sup>1</sup> .....	13.0465– 13.0525
F08 <sup>1</sup> .....	13.0525– 13.0585
F09 <sup>1</sup> .....	13.0585– 13.0645
F10 <sup>1</sup> .....	<sup>2</sup> 13.0645– 13.0665
F11 <sup>1</sup> .....	<sup>2</sup> 13.0665– 13.0725
F12 <sup>1</sup> .....	13.0725– 13.0785
F13 <sup>1</sup> .....	13.0785– 13.0845
F14 <sup>1</sup> .....	13.0845– 13.0905
F15 <sup>1</sup> .....	13.0905– 13.0965
F16 <sup>1</sup> .....	13.0965– 13.1025
F17 <sup>1</sup> .....	13.1025– 13.1085
F18 <sup>1</sup> .....	13.1085– 13.1145
F19 <sup>1</sup> .....	13.1145– 13.1205
F20 <sup>1</sup> .....	13.1205– 13.1265
F21 <sup>1</sup> .....	13.1265– 13.1325
F22 <sup>1</sup> .....	13.1325– 13.1385
F23 <sup>1</sup> .....	13.1385– 13.1445
F24 <sup>1</sup> .....	<sup>3</sup> 13.1445– 13.1505
F25 <sup>1</sup> .....	<sup>3</sup> 13.1505– 13.1565
F26 <sup>1</sup> .....	<sup>3</sup> 13.1565– 13.1625
F27 <sup>1</sup> .....	<sup>3</sup> 13.1625– 13.1685

## GROUP F CHANNELS—Continued

Designation	Channel boundaries (GHz)
F28 <sup>1</sup> .....	<sup>3</sup> 13.1685– 13.1745
F29 <sup>1</sup> .....	<sup>3</sup> 13.1745– 13.1805
F30 <sup>1</sup> .....	<sup>3</sup> 13.1805– 13.1865
F31 <sup>1</sup> .....	<sup>3</sup> 13.1865– 13.1925
F32 <sup>1</sup> .....	<sup>3</sup> 13.1925– 13.1985

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.  
<sup>2</sup> See footnote 2 following GROUP C CHANNELS.  
<sup>3</sup> See paragraph (l) of this section.

(3) For CARS stations using AM and FM transmission requiring a necessary bandwidth of no more than 12.5 MHz.

## GROUP K CHANNEL

Designation	Channel boundaries (GHz)
K01 <sup>1</sup> .....	12.7000– 12.7125
K02 <sup>1</sup> .....	12.7125– 12.7250
K03 <sup>1</sup> .....	12.7250– 12.7375
K04 <sup>1</sup> .....	12.7375– 12.7500
K05 <sup>1</sup> .....	12.7500– 12.7625
K06 <sup>1</sup> .....	12.7625– 12.7750
K07 <sup>1</sup> .....	12.7750– 12.7875
K08 <sup>1</sup> .....	12.7875– 12.8000
K09 <sup>1</sup> .....	12.8000– 12.8125
K10 <sup>1</sup> .....	12.8125– 12.8250
K11 <sup>1</sup> .....	12.8250– 12.8375
K12 <sup>1</sup> .....	12.8375– 12.8500
K13 <sup>1</sup> .....	12.8500– 12.8625
K14 <sup>1</sup> .....	12.8625– 12.8750
K15 <sup>1</sup> .....	12.8750– 12.8875
K16 <sup>1</sup> .....	12.8875– 12.9000
K17 <sup>1</sup> .....	12.9000– 12.9125
K18 <sup>1</sup> .....	12.9125– 12.9250
K19 <sup>1</sup> .....	12.9250– 12.9375
K20 <sup>1</sup> .....	12.9375– 12.9500
K21 <sup>1</sup> .....	12.9500– 12.9625
K22 <sup>1</sup> .....	12.9625– 12.9750
K23 <sup>1</sup> .....	12.9750– 12.9875

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**GROUP K CHANNEL—Continued**

Designation	Channel bound- aries (GHz)
K24 <sup>1</sup> .....	12.9875– 13.0000
K25 <sup>1</sup> .....	13.0000– 13.0125
K26 <sup>1</sup> .....	13.0125– 13.0250
K27 <sup>1</sup> .....	13.0250– 13.0375
K28 <sup>1</sup> .....	13.0375– 13.0500
K29 <sup>1</sup> .....	13.0500– 13.0625
K30 <sup>1</sup> .....	13.0625– 13.0750
K31 <sup>1</sup> .....	13.0750– 13.0875
K32 <sup>1</sup> .....	13.0875– 13.1000
K33 <sup>1</sup> .....	13.1000– 13.1125
K34 <sup>1</sup> .....	13.1125– 13.1250
K35 <sup>1</sup> .....	13.1250– 13.1375
K36 <sup>1</sup> .....	13.1375– 13.1500
K37 <sup>1,2</sup> .....	13.1500– 13.1625
K38 <sup>1,2</sup> .....	13.1625– 13.1750
K39 <sup>1,2</sup> .....	13.1750– 13.1875
K40 <sup>1,2</sup> .....	13.1875– 13.2000

<sup>1</sup> See footnote 1 following GROUP A CHANNELS.

<sup>2</sup> See paragraph (I) of this section.

(4) The Cable Television Relay Service is also assigned the following frequencies in the 17,700 to 19,700 MHz band. These frequencies are co-equally shared with stations in fixed service under Parts 21, 74 and 94 of the Commission's Rules. Applicants may use either a two-way link or one or both frequencies of a frequency pair for a one-way link and shall coordinate proposed operations pursuant to procedures required in §21.100(d). These bands may be used for analog or digital modulation.

(i) 2 MHz maximum authorized bandwidth channel:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
18141.0 .....	n/a

(ii) 6 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
216 MHz Separation	
18145.0 .....	n/a
18151.0 .....	18367.0
18157.0 .....	18373.0
18163.0 .....	18379.0
18169.0 .....	18385.0
18175.0 .....	18391.0
18181.0 .....	18397.0
18187.0 .....	18403.0
18193.0 .....	18409.0
18199.0 .....	18415.0
18205.0 .....	18421.0
18211.0 .....	18427.0
18217.0 .....	18433.0
18223.0 .....	18439.0
18229.0 .....	18445.0
18235.0 .....	18451.0
18241.0 .....	18457.0
18247.0 .....	18463.0
18253.0 .....	18469.0
18259.0 .....	18475.0
18265.0 .....	18481.0
18271.0 .....	18487.0
18277.0 .....	18493.0
18283.0 .....	18499.0
18289.0 .....	18505.0
18295.0 .....	18511.0
18301.0 .....	18517.0
18307.0 .....	18523.0
18313.0 .....	18529.0
18319.0 .....	18535.0
18325.0 .....	18541.0
18331.0 .....	18547.0
18337.0 .....	18553.0
18343.0 .....	18559.0
18349.0 .....	18565.0
18355.0 .....	18571.0
18361.0 .....	18577.0

(iii) 10 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17705.0 .....	19265.0
17715.0 .....	19275.0
17725.0 .....	19285.0
17735.0 .....	19295.0
17745.0 .....	19305.0
17755.0 .....	19315.0
17765.0 .....	19325.0
17775.0 .....	19335.0
17785.0 .....	19345.0
17795.0 .....	19355.0
17805.0 .....	19365.0
17815.0 .....	19375.0
17825.0 .....	19385.0
17835.0 .....	19395.0
17845.0 .....	19405.0
17855.0 .....	19415.0
17865.0 .....	19425.0
17875.0 .....	19435.0
17885.0 .....	19445.0
17895.0 .....	19455.0
17905.0 .....	19465.0
17915.0 .....	19475.0

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Transmit (receive) (MHz)	Receive (transmit) (MHz)
17925.0 .....	19485.0
17935.0 .....	19495.0
17945.0 .....	19505.0
17955.0 .....	19515.0
17965.0 .....	19525.0
17975.0 .....	19535.0
17985.0 .....	19545.0
17995.0 .....	19555.0
18005.0 .....	19565.0
18015.0 .....	19575.0
18025.0 .....	19585.0
18035.0 .....	19595.0
18045.0 .....	19605.0
18055.0 .....	19615.0
18065.0 .....	19625.0
18075.0 .....	19635.0
18085.0 .....	19645.0
18095.0 .....	19655.0
18105.0 .....	19665.0
18115.0 .....	19675.0
18125.0 .....	19685.0
18135.0 .....	19695.0

(iv) 20 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17710.0 .....	19270.0
17730.0 .....	19290.0
17750.0 .....	19310.0
17770.0 .....	19330.0
17790.0 .....	19350.0
17810.0 .....	19370.0
17830.0 .....	19390.0
17850.0 .....	19410.0
17870.0 .....	19430.0
17890.0 .....	19450.0
17910.0 .....	19470.0
17930.0 .....	19490.0
17950.0 .....	19510.0
17970.0 .....	19530.0
17990.0 .....	19550.0
18010.0 .....	19570.0
18030.0 .....	19590.0
18050.0 .....	19610.0
18070.0 .....	19630.0
18090.0 .....	19650.0
18110.0 .....	19670.0
18130.0 .....	19690.0

(v) 40 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17720.0 .....	19280.0
17760.0 .....	19320.0
17800.0 .....	19360.0
17840.0 .....	19400.0
17880.0 .....	19440.0
17920.0 .....	19480.0
17960.0 .....	19520.0

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Transmit (receive) (MHz)	Receive (transmit) (MHz)
18000.0 .....	19560.0
18040.0 .....	19600.0
18080.0 .....	19640.0
18120.0 .....	19680.0

(vi) 80 MHz maximum authorized bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
1560 MHz Separation	
17740.0 .....	19300.0
17820.0 .....	19380.0
17900.0 .....	19460.0
17980.0 .....	19540.0
18060.0 .....	19620.0

(5) *6425 to 6525 MHz-Mobile Only.* Paired and unpaired operations permitted. Use of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted. This band is co-equally shared with mobile stations licensed pursuant to parts 21, 74 and 94 of the Commission's Rules. The following channels plans apply.

(i) 1 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6425.5 .....	6475.5
6450.5 .....	6500.5

(ii) 8 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6430.0 .....	6480.0
6438.0 .....	6488.0
6446.0 .....	6596.0
6455.0 .....	6505.0
6463.0 .....	6513.0
6471.0 .....	6521.0

(iii) 25 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6437.5 .....	6487.5
6462.5 .....	6512.5

(6) *1990–2110 MHz—Mobile only.* Use of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted. This band is co-equally shared with stations licensed pursuant

to parts 21 and 74 of the Commission's Rules. (Common carriers may use this band pursuant to provisions of §21.801(b).) The following channeling plan applies subject to the provisions of § 74.604.

*Frequency Band (MHz)*

1990–2008  
2008–2025  
2025–2042  
2042–2059  
2059–2076  
2076–2093  
2093–2110

(7) *6875–7125 MHz—Mobile only.* Use of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted. This band is co-equally shared with stations licensed pursuant to parts 21 and 74 of the Commission's Rules. (Common carriers may use this band pursuant to provisions of §21.801(b).) The following channeling plan applies subject to the provisions of § 74.604.

*Frequency Band (MHz)*

6875–6900  
6900–6925  
6925–6950  
6950–6975  
6975–7000  
7000–7025  
7025–7050  
7050–7075  
7075–7100  
7100–7125

(b) Television Auxiliary Broadcast Service stations may be assigned channels in the band 12.70–13.20 GHz subject to the condition that no harmful interference is caused to fixed CARS stations authorized at the time of such grants. Translator Relay stations are assigned on a secondary basis. New CARS stations shall not cause harmful interference to television STL and intercity relay stations authorized at the time of such grants. Television pickup stations and CARS pickup stations will be assigned channels in the band on a co-equal basis subject to the conditions that they accept interference from and cause no interference to existing or subsequently authorized television STL, television intercity relay, or fixed CARS stations. Channels in the 13.150–13.200 GHz band will be as-

signed exclusively to television pickup and CARS pickup stations on a co-equal basis. A cable television system operator will normally be limited in any one area to the assignment of not more than three channels for CARS pickup use: *Provided, however,* That additional channels may be assigned upon a satisfactory showing that additional channels are necessary and are available.

(c) An application for a CARS station shall be specific with regard to the channel or channels requested. Channels shall be identified by the appropriate designations set forth in paragraph (a) of this section.

(d) For CARS Fixed stations using FM transmission with an authorized bandwidth per channel of 25 MHz, to conserve spectrum applicants are encouraged to use alternate A and B channels such that adjacent R.F. carriers are spaced 12.5 MHz. As example, a fixed station in the CARS, relaying several channels, would use A01, B01, A02, B02, A03, etc.

(e) For CARS stations using vestigial sideband AM transmissions, channels from only the Groups C, D, E or F and those frequencies listed in paragraph (a)(4)(ii) of this section normally will be assigned a station, although upon adequate showing variations in the use of channels in Groups C, D, E or F and those frequencies listed in paragraph (a)(4)(ii) of this section may be authorized on a case-by-case basis in order to avoid potential interference or to permit a more efficient use. In situations where the number or the arrangement of channels available in these groups is not adequate, or in order to avoid potential interference, or in order to achieve the required VHF channelization arrangement on the cable television system or for repeated operations, or for two way transmission, or upon the showing of other good cause, the use of channels in the Groups C, D, E or F and those frequencies listed in paragraph (a)(4)(ii) of this section may be authorized. Applicants are encouraged to apply for adjacent channels within each group of channels, except that different channel arrangements may be authorized when required to conform to the required channelization

arrangement at VHF on the cable television system, when it is necessary to transmit non-adjacent off-the-air channels or signals intended to fill non-adjacent slots in the spectrum, or to avoid potential interference, or upon other showing of good cause.

(f) For vestigial sideband AM transmission, the assigned visual carrier frequency for each channel listed in Groups C, D, E or F and those frequencies listed in paragraph (a)(4)(ii) of this section shall be 1.25 MHz above the lower channel-edge frequency. The center frequency for the accompanying FM aural carrier in each channel shall be 4.5 MHz above the corresponding visual carrier frequency.

(g) For CARS stations using double sideband AM transmission or FM transmission with authorized bandwidth of no more than 12.5 MHz, Group K channels normally will be assigned to a station, although upon adequate showing variations in the use of channels in Group K may be authorized on a case-by-case basis in order to avoid potential interference or to permit a more efficient use.

(h) For double sideband AM transmission, the assigned carrier frequency for each channel listed in Group K shall be 6.25 MHz above the lower boundary frequency for each channel, and the sideband frequencies corresponding to the carrier frequency of the accompanying FM aural signal shall be 4.5 MHz above and below the visual carrier frequency.

(i) All stations shall employ no more than a 12.5 MHz authorized bandwidth per channel except in any one or more of the following circumstances:

- (1) The station is a CARS pickup station;
- (2) The transmission path is more than 16.1 km (10 miles) in length;
- (3) The station was authorized or an application was on file therefor prior to July 26, 1973.
- (4) Other good cause has been shown that use of a bandwidth of 12.5 MHz or less per channel would be inefficient, impractical, or otherwise contrary to the public interest.

(j) Should any conflict arise among applications for stations in this band, priority will be based on the filing date

of an application completed in accordance with the instructions thereon.

(k) Applicants for Group K channels shall apply for adjacent channels and the requested channels shall overlap the least possible number of Group A channels, except that different channel arrangements may be authorized upon an adequate showing that the foregoing arrangement cannot be used or would be contrary to the public interest, or in order to avoid potential interference or to permit a more efficient use.

(l) The band 13.15–13.20 GHz is reserved exclusively for the assignment of CARS Pickup and Television Pickup stations on a co-equal basis within a 50 km radius of each of the 100 television markets delineated in § 76.51. Fixed Television Auxiliary stations licensed pursuant to applications accepted for filing before September 1, 1979, may continue operation on channels in the 13.15–13.20 GHz band, subject to periodic license renewals.

[37 FR 3292, Feb. 12, 1972. Redesignated at 37 FR 15926, Aug. 8, 1972.]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 78.18, see the List of CFR Sections Affected in the Finding Aids section of this volume.

#### § 78.19 Interference.

(a) Applications for CARS stations shall endeavor to select an assignable frequency or frequencies which will be least likely to result in interference to other licensees in the same area since the FCC itself does not undertake frequency coordination.

(b) Applicants for CARS stations shall take full advantage of all known techniques, such as the geometric arrangement of transmitters and receivers, the use of minimum power required to provide the needed service, and the use of highly directive transmitting and receiving antenna systems, to prevent interference to the reception of television STL, television intercity relay, and other CARS stations.

(c)(1) *Radio Astronomy and Radio Research Installations.* In order to minimize harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, W. Va., and at the Naval Radio Research Observatory at Sugar Grove,